

pipe I sat down for a short rest upon the huge grey head. The second bull succumbed about half a mile from where I had first fired. It was now well on in the afternoon, and my "skerm" was about six miles away; so, leaving the animals where they were, I went to the camp, packed up my goods, and came back again. It was then close to sunset, and I had only time to take two quick shots with the camera and make a cut in the stomach and bush the carcass up for the night. I then went to the second bull, cut him open, bushed him up, and then in the pitch darkness proceeded to make a large skerm, for it was to be permanent for several days at any rate. Next morning the carcasses had swelled up considerably, but I managed to take a few measurements and make some sketches before skinning them. For eleven days I stayed at that skerm, cleaning the bones, drying the skins, and watching the boys, for they had an annoying habit of throwing the smaller bones away; it may be imagined that, with the quantity of small scraps of meat lying about in the hot sun, in a few days the place had grown—well, unpleasant!

I stayed about that country a few days longer, then brought the specimens into Salisbury—not without a very considerable amount of trouble. A few days after that I left Salisbury with the troops for Matabililand, served through the whole of the war, and then in January I came home. The Rhinoceroses preceded me by a few weeks. One of them will be set up in the Natural History Museum at South Kensington; of the other, the skeleton goes to the Cambridge University Museum, and the skin to the Hon. Walter Rothschild's Museum at Tring.

4. List of Butterflies collected by Captain J. W. Pringle, R.E., on the March from Teita to Uganda, in British East Africa. By EMILY MARY SHARPE<sup>1</sup>.

[Received March 20, 1894.]

(Plate XIX.)

The collection of Butterflies described in the present paper was made by Captain Pringle, R.E., during his survey for the projected railway to Uganda on behalf of the Government, under the auspices of the Imperial British East-African Company. The care with which the elevations have been recorded by him renders the collection of especial value to the student of the geographical distribution of Lepidoptera, and it is much to be regretted that such an accurate observer as Captain Pringle was not enabled to make a longer stay in East Africa.

In this communication I have referred especially to Mr. Kirby's 'Catalogue of Diurnal Lepidoptera,' to Dr. Roland Trimen's work on South-African Butterflies, and to a paper by Mr. Hampson

<sup>1</sup> Communicated by Dr. R. BOWDLER SHARPE, F.Z.S.



1.

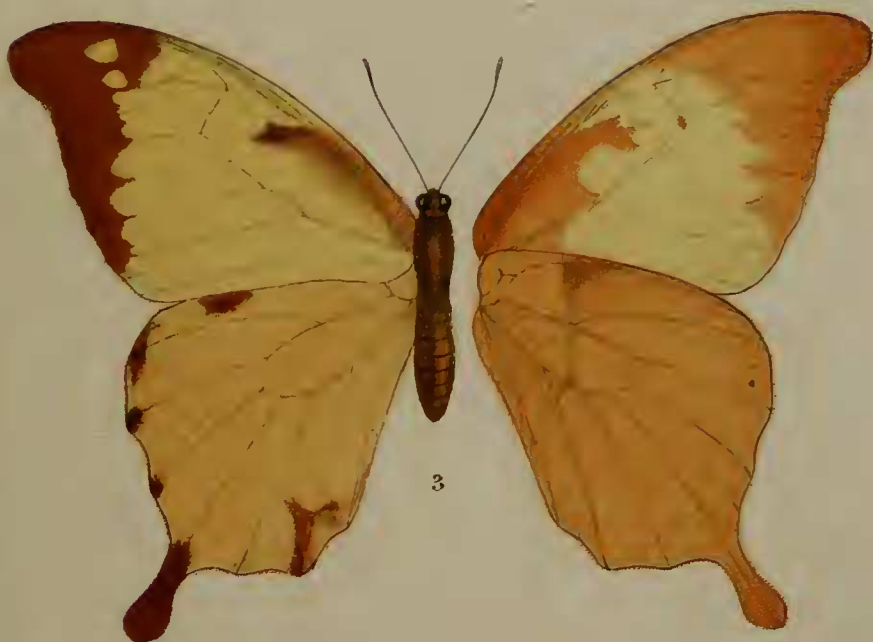


2

2a



2b



3



4.



5.



entitled "Lepidoptera from the Sabaki River," Ann. Nat. Hist. (6) vii. 1891.

I am much indebted to Dr. A. G. Butler for his kind help in identifying the more obscure species mentioned in the present paper.

### Family DANAIIDÆ.

#### 1. LIMNAS KLUGII.

*Limnas klugii*, Butler, P. Z. S. 1885, p. 758; Hampson, Ann. Nat. Hist. (6) vii. p. 179 (1891, Sabaki River).

- a. Nzoi, 3500 feet, Feb. 1-15, 1893.
- b. Teita, 3500 feet, to Voi River, 2100 feet, Jan. 1892.
- c. Teita to Ndara Hill, 3300 feet, Feb. 3, 1892.
- d. Kibwezi, 3000 feet, Feb. 4-6, 1892.
- e. March from Mbololo in Ndi to Tsavo, 2300 to 1650 feet, Jan. 9-11, 1892.

#### 2. MELINDA FORMOSA.

*Danais formosa*, Godman, P. Z. S. 1880, p. 183, pl. xix. fig. 1 (Gnuru Hills, E. Africa).

*Melinda formosa*, Moore, P. Z. S. 1883, p. 229.

- a. Kikuyu to Victoria Nyanza *via* Sotik, May 4, 1892.

#### 3. AMAURIS ECHERIA.

*Amauris echeria* (Stoll); Kirby, Syn. Cat. Diurn. Lepid. p. 8 (1871); Trimen, S. Afr. Batt. i. p. 57 (1887).

*Nebroda echeria* (Stoll); Moore, P. Z. S. 1883, p. 228.

- a-c. Teita to Ndara Hill, 3300 feet, Feb. 3, 1892.
- d. Teita, 3500, to Voi River, 2100 feet, Jan. 5-6, 1892.

### Family SATYRIDÆ.

#### 4. MELANITIS LEDA.

*Melanitis leda* (Linn.); Kirby, op. cit. p. 43 (1871); Trimen, op. cit. i. p. 112 (1887).

*Melanitis solandra* (Fabr.); Butler, Cat. Lepid. Satyr. p. 3 (1868).

*Melanitis bankia* (Fabr.); Hampson, op. cit. (6) vii. p. 180 (1891, Sabaki River).

- a. Voi River, 1600 feet, Jan. 20, 1892.

#### 5. MONOTRICHTIS SAFITZA.

*Mycalasis safitza*, Hewits.; Kirby, op. cit. p. 87 (1871); Butler, Cat. Satyr. p. 128 (1868); Trimen, op. cit. i. p. 105 (1887).

*Mycalasis (Monotrichtis) safitza*, Hampson, op. cit. (6) vii. p. 180 (1891, Sabaki River).

- a. Maungu to Maragoyakanga, 3100 to 2400 feet, Dec. 30, 1891.
- b-d. Teita to Ndara Hill, 3300 feet, Feb. 3, 1892.

## 6. MYCALESIS PERSPICUA.

*Mycalesis perspicua*, Trim. ; Kirby, op. cit. App. p. 707 (1877); Trimen, op. cit. i. p. 107 (1887).

*Samanta perspicua*, Butl. P. Z. S. 1888, p. 59 (Tobbo).

a, b. Nzoi, 3500 feet, Feb. 1-15, 1892.

c. Maungu to Maragoyakanga, 3100 to 2400 feet, Dec. 12, 1891.

## 7. MYCALESIS SOCOTRANA.

*Calysisme socotrana*, Butl. P. Z. S. 1881, p. 175, pl. xvii. fig. 7 (Socotra).

a. Maungu to Maragoyakanga, 3100 to 2400 feet, Dec. 30, 1891.

## 8. YPETHIMA DOLETA.

*Mycalesis doleta*, Kirby, Proc. Roy. Dubl. Soc. (2) ii. p. 336 (1880); Godm. & Salv. P. Z. S. 1884, p. 220 (Lower Niger).

a. March from Mreru in Ndi to Tsavo, 2300 to 1650 feet, Jan. 9-11, 1892.

b. Voi River, 1600 feet, Jan. 20, 1892.

## 9. YPETHIMA ALBIDA. (Plate XIX. fig. 4.)

*Ypthima albida*, Butl. P. Z. S. 1888, p. 59 (Fóda).

a. Teita District.

## 10. NEOCENYRA DUPLEX.

*Neocenyra duplex*, Butl. P. Z. S. 1885, p. 758 (Somaliland).

a. Maungu to Maragoyakanga, 3100 to 2400 feet, Dec. 30, 1891.

b. Mreru in Ndi to Tsavo, 2300 to 1650 feet, Jan. 9-11, 1892.

c. Nzoi, 3500 feet, Feb. 1-15, 1892.

## RHAPHICEROPSIS, gen. nov.

Similar to the genus *Neope*, but easily distinguished by the spatulate club to the antennæ. The type is

## 11. RHAPHICEROPSIS PRINGLEI, sp. n. (Plate XIX. figs. 1, 2.)

Colour very pale primrose-yellow with black markings. Fore wing: basal half pale yellow, the apical half black as well as the hind margin beyond the posterior angle. There are three small spots of yellow, one in each of the second and third median nervules, and the third above the subcostal nervure. From the costal margin is an oblique mark of yellow reaching to the apical end of the discoidal cell; base of wing blackish; near the base is a small black spot.

Hind wing almost entirely primrose-yellow, the mottlings of the under surface visible; a black line along the costa and hind margin to the anal angle; on the first median nervule is a small maroon spot; above the hind marginal border a black spot between the first and second median nervule, the marginal line

being divided by a thread of primrose-yellow from the anal angle to the third median nervule.

Expanse 1·7 inch.

*a, b.* Kikuyu to Victoria Nyanza *via* Sotik, May 5, 1892.

#### Family ACRÆIDÆ.

##### 12. ACRÆA REGALIS.

*Acræa regalis*, Oberthür, Études d'Ent. p. 20, pl. ii. fig. 20 (1893).

*a.* Maungu Hill, 3100 feet, Dec. 30, 1891.

*b.* Kibwezi, Feb. 5, 1892.

##### 13. ACRÆA CIRCEIS.

*Acræa circeis* (Drury); Kirby, op. cit. p. 132 (1871).

*a.* Usoga to Uganda, June 1892.

##### 14. ACRÆA BRÆSIA.

*Acræa bræsia*, Godm. P. Z. S. 1885, p. 538 (Kilimanjaro); Hampson, op. cit. (6) vii. p. 180 (1891, Sabaki River).

*a, b.* Teita to Voi River, 1600 feet, Jan. 20, 1892.

*c.* Kibwezi, Feb. 5, 1892.

##### 15. ACRÆA NATALICA.

*Acræa natalica*, Boisd.; Kirby, op. cit. p. 132 (1871); Trimen, op. cit. i. p. 155 (1887); Hampson, op. cit. (6) vii. p. 180 (1891, Sabaki River).

*a, b.* Teita to Ndara Hill, 3300 feet, Feb. 3, 1890.

*c.* March from Maungu Hill to Maragoyakanga, 3100 to 2400 feet, Dec. 30, 1891.

##### 16. ACRÆA BUXTONI.

*Acræa buxtoni*, Butl.; Trimen, op. cit. i. p. 170 (1887); id. P. Z. S. 1891, p. 74 (South-western Africa).

*a.* Nzoi, 3500 feet, Feb. 15, 1892.

##### 17. ACRÆA VINIDIA.

*Acræa vinidia*, Hew.; Kirby, op. cit. App. p. 720 (1877).

*a-h.* Uganda.

##### 18. ACRÆA CABIRA.

*Acræa cabira*, Hopff.; Kirby, op. cit. p. 132 (1871); Trimen, op. cit. i. p. 173 (1887).

*a.* March from Teita, 3500 feet, to Voi River, 2100 feet, Jan. 6, 1892.

*b.* Nzoi, 3500 feet, Feb. 15, 1892.



19. *ACRÆA PHARSALUS*.

*Acræa pharsalus*, Ward ; Kirby, op. cit. App. p. 720 (1877).

a. Uganda.

20. *ACRÆA PERENNA*.

*Acræa perenna*, Doubl. & Hewits. ; Kirby, op. cit. p. 135 (1871).

*Gnesia perenna*, Butl. P. Z. S. 1888, p. 66 (Kangasi).

a. Uganda.

21. *ACRÆA LYCIA*.

*Acræa lycia* (Fabr.) ; Kirby, op. cit. p. 131 (1871).

a. March from Teita, 3500 feet, to Voi River, 2100 feet, Jan. 6, 1892.

22. *ACRÆA OREAS*.

*Acræa oreas*, E. M. Sharpe, P. Z. S. 1891, p. 193, pl. xvii. fig. 5 (Mt. Elgon).

a-c. March from Kikuyu to Victoria Nyanza *viâ* Sotik, May 4 1892.

23. *PLANEMA JOHNSTONI*.

*Acræa johnstoni*, Godm. P. Z. S. 1885, p. 537 (Kilimanjaro) ; Butler, P. Z. S. 1888, p. 91.

*Acræa proteina*, Oberthür, Études d'Ent. p. 25, pl. i. fig. 4 (1893).

a. March from Teita, 3500 feet, to Voi River, 2100 feet, Jan. 6, 1892.

24. *PLANEMA FULVESCENS*.

*Acræa proteina fulvescens*, Oberthür, Études d'Ent. p. 26, pl. ii. fig. 21 (1893).

a. March from Teita, 3500 feet, to Voi River, 2100 feet, Jan. 6, 1892.

This specimen does not entirely agree with M. Oberthür's figure, having less black on both wings. It is probably a variation of *P. johnstoni*, Godm., with which *P. proteina* of Oberthür is undoubtedly identical.

25. *PLANEMA MONTANA*.

*Planema montana*, Butl. P. Z. S. 1888, p. 91 (Kilimanjaro).

a. Ndara Hill, Teita, 3300 feet, Jan. 3, 1892.

b. March from Teita, 3500 feet, to Voi River, 2100 feet, Jan. 6, 1892.

26. *ALÆNA JOHANNÆ*. (Plate XIX. fig 5.)

*Alæna johannæ*, E. M. Sharpe, Ann. Nat. Hist. (6) v. p. 442 (1890).

a. Tsavo River, 1500 feet.

## Family NYMPHALIDÆ.

27. *HYPANARTIA DELIUS*.

*Hypanartia delius* (Drury); Kirby, op. cit. p. 181 (1871).

a, b. Teita District.

28. *JUNONIA CLELIA*.

*Junonia clelia* (Cram.); Kirby, op. cit. p. 187 (1871); Trimen, op. cit. i. p. 214 (1887).

*Junonia œnone* (Linn.); Hampson, op. cit. (6) vii. p. 180 (1891, Sabaki River).

a. March from Maungu to Maragoyakanga, 3100 feet to 2400 feet, Dec. 30, 1891.

b. Tsavo River, 1500 feet.

c. March from Teita, 3500 feet, to Voi River, 2100 feet, Jan. 6, 1892.

d. Kibwezi, 3000 feet, Feb. 6, 1892.

e. Nzoi, 3500 feet, Feb. 15, 1892.

29. *JUNONIA CEBRENE*.

*Junonia cebrene*, Trimen, op. cit. i. p. 210 (1887).

*Junonia crebrene*, Hampson, op. cit. (6) vii. p. 180 (1891, Sabaki River).

a. Tsavo River, 1500 feet.

b, c. March from Maungu to Maragoyakanga, 3100 to 2400 feet, Dec. 30, 1891.

d. March from Teita, 3500 feet, to Voi River, 2100 feet, Jan. 6, 1892.

30. *JUNONIA WESTERMANNI*.

*Junonia westermanni*, Westw.; Kirby, op. cit. App. p. 734 (1877).

a. Teita District.

31. *PRECIS TEREÆ*.

*Precis tereæ* (Drury); Kirby, op. cit. p. 189 (1871).

a, b. Teita District.

32. *PRECIS NATALICA*.

*Precis natalica*, Feld.; Kirby, op. cit. p. 190 (1871); Trimen, op. cit. i. p. 238 (1887).

*Junonia natalica*, Hampson, op. cit. (6) vii. p. 180 (1891, Sabaki River).

a. March from Maungu to Maragoyakanga, 3100 to 2400 feet, Dec. 30, 1891.

b. March from Teita, 3500 feet, to Voi River, 2100 feet, Jan. 6, 1892.

c. March from Voi River to Ndi, 2300 feet, Jan. 8, 1892.

d. Ndara Hill to Teita, 3300 feet, Feb. 3, 1892.

e. Nzoi, 3500 feet, Feb. 16, 1892.



33. *PRECIS LIMNORIA*.

*Precis limnoria* (Klug); Kirby, op. cit. p. 190 (1871); Butl. P. Z. S. 1885, p. 759 (Somali-land).

a-c. March from Maungu Hill to Maragoyakanga, 3100 to 2400 feet.

d. March from Teita, 3500 feet, to Voi River, 2100 feet, Jan. 6, 1892.

34. *PRECIS SINUATA*.

*Precis sinuata*, Plötz; E. M. Sharpe, P. Z. S. 1893, p. 555.

a, b. Kibwezi, 3000 feet, Feb. 6, 1892.

35. *PRECIS CUAMA*.

*Precis cuama* (Hewits.); Kirby, op. cit. p. 191 (1871).

a, b. Tsavo River, 1500 feet.

c-e. March from Maungu Hill to Maragoyakanga, 3100 to 2400 feet, Dec. 30, 1891.

36. *PRECIS SESAMUS*.

*Precis sesamus*, Trimen, op. cit. i. p. 231 (1887).

a. March from Kikuyu to Victoria Nyanza *viâ* Sotik, May 4, 1892.

37. *PRECIS CLOANTHA*.

*Precis cloantha* (Cram.); Kirby, op. cit. p. 191 (1871); Trimen, op. cit. i. p. 222 (1887).

a. March from Teita, 3500 feet, to Voi River, 2100 feet, Jan. 6, 1892.

b. March from Kikuyu to the Victoria Nyanza *viâ* Mau and Sotik, 8000 feet, May 4, 1892.

38. *ERGOLIS ENOTREA*.

*Ergolis enotrea* (Cram.); Kirby, op. cit. p. 195 (1871).

a. Teita District.

39. *EURYTELA HIARBAS*.

*Eurytela hiarbas* (Drury); Kirby, op. cit. p. 195 (1871); Trimen, op. cit. i. p. 258 (1887).

a. March from Kikuyu to the Victoria Nyanza *viâ* Mau and Sotik, 8000 feet, May 4, 1892.

40. *EURYTELA DRYOPE*.

*Eurytela dryope* (Cram.); Kirby, op. cit. p. 194 (1871); Trimen, op. cit. i. p. 261 (1887); Hampson, op. cit. (6) vii. p. 180 (1891, Sabaki River).

a-c. Voi River, Teita, 1600 feet, Jan. 20, 1892.

41. *EURYTELA OPHIONE*.

*Eurytela ophione* (Cram.); Kirby, op. cit. p. 195 (1871).

a-c. Voi River, Teita, 1600 feet, Jan. 20, 1892.

42. *DIADEMA MISIPPUS*.

*Hypolimnas misippus* (Linn.); Kirby, op. cit. p. 225 (1871).

*Diadema misippus*, Trimen, op. cit. i. p. 277 (1887); Hampson, op. cit. (6) vii. p. 180 (1891, Sabaki River).

a. March from Teita, 3500 feet, to Voi River, 2100 feet, Jan. 6, 1892.

b. Kibwezi, 3000 feet, Feb. 6, 1892.

c, d. Nzoi, 3500 feet, Feb. 15, 1892.

43. *NEPTIS AGATHA*.

*Neptis agatha* (Cram.); Kirby, op. cit. p. 242 (1871); Trimen, op. cit. i. p. 270 (1887).

a-c. Ndara Hill, Teita, 3300 feet, Feb. 3, 1892.

44. *HAMANUMIDA DÆDALUS*.

*Ham anumida dædalus* (Fabr.); Kirby, op. cit. p. 249 (1871); Trimen, op. cit. i. p. 309 (1887); Hampson, op. cit. (6) vii. p. 180 (1891, Sabaki River).

a. Voi River, 1600 feet, Jan. 20, 1892.

45. *SALAMIS ANACARDII*.

*Salamis anacardii* (Linn.); Kirby, op. cit. p. 192 (1871); Trimen, op. cit. i. p. 244 (1887).

a. Kibwezi, Feb. 6, 1892.

b. Nzoi, 3500 feet, Feb. 15, 1892.

46. *SALAMIS AGLATONICE*.

*Salamis anacardii*, Godt., pt.; Kirby, op. cit. p. 192 (1871); Trimen, op. cit. i. p. 244 (1887).

a, b. Tsavo River, 1500 feet.

c, d. Voi River, 1600 feet, Jan. 20, 1892.

47. *PHILOGNOMA VARANES*.

*Palla varanes* (Cram.); Kirby, op. cit. p. 274 (1871); Hampson, op. cit. (6) vii. p. 181 (1891, Sabaki River).

a. Usoga, 4000 feet.

b. March from Maungu to Maragoyakanga, 3100 to 2400 feet, Dec. 30, 1891.

c, d. Ndara Hill, Teita, 3500 feet, Feb. 3, 1892.

48. *PHILOGNOMA USSHERI*.

*Palla ussheri* (Butl.); Kirby, op. cit. p. 273 (1871).

a. Uganda, 4000 feet.

49. *CHARAXES TIRIDATES*.

*Nymphalis tiridates* (Cram.); Kirby, op. cit. p. 269 (1871).

a. March from Usoga to Uganda, 4000 feet, June 1892.

50. *HYPANIS ILITHYIA*.

*Hypanis ilithyia* (Drury); Kirby, op. cit. p. 196 (1871); Trimen, op. cit. i. p. 264 (1887).

*Byblia ilithyia*, Hampson, op. cit. (6) vii. p. 180 (1891, Sabaki River).

a-c. March from Maungu to Maragoyakanga, Jan. 1, 1892.

d, e. March from Teita, 3500 feet, to Voi River, 2100 feet, Jan. 6, 1892.

f. Kibwezi, 3000 feet, Feb. 6, 1892.

51. *CYRESTIS CAMILLUS*.

*Cyrestis camillus* (Fabr.); Kirby, op. cit. p. 220 (1871).

a-d. Uganda, 4000 feet.

52. *EURYPHENE CALABARENSIS*.

*Euryphene calabarensis*, Feld.; Kirby, op. cit. p. 246 (1871).

a. Uganda, 4000 feet.

## Family ERYCINIDÆ.

53. *ABISARA GERONTES*.

*Abisara gerontes* (Fabr.); Butler, P. Z. S. 1888, p. 67.

a. Uganda, 4000 feet, June 1892.

## Family LYCENIDÆ.

54. *LACHNOCNEMA BIBULUS*.

*Lucia bibulus* (Fabr.); Kirby, op. cit. p. 337 (1871); Trimen, op. cit. ii. p. 235 (1887).

a. Ndara Hill, 3300 feet, Feb. 3, 1892.

55. *ZERITIS PERION*.

*Axiocerses perion* (Cram.); Kirby, op. cit. p. 338 (1871).

*Chrysorychia harpax*, Fabr., pt.; Trimen, op. cit. ii. p. 162 (1887).

a. Ndara Hill, Teita, 3300 feet, Feb. 3, 1892.

56. *LYCÆNA JUBA*.

*Cupido juba* (Fabr.); Kirby, op. cit. p. 349 (1871).

a. March from Kikuyu, 6500 feet, to Victoria Nyanza *via* Sotik, May 4, 1892.

b, c. Uganda, 4000 feet.

57. *LYCÆNA MORIQUA*.

*Cupido moriqua* (Wallgr.); Kirby, op. cit. p. 351 (1871); Trimen, op. cit. ii. p. 75 (1887).

a-d. Teita, Jan. 1892.

e. March from Mreru in Ndi to Tsavo, 2300 to 1650 feet, Jan. 11, 1892.

58. *LYCÆNA BÆTICA*.

*Cupido bæticus* (Linn.); Kirby, op. cit. p. 354 (1871).

*Lycæna bætica*, Trimen, op. cit. ii. p. 58 (1887).

a. March from Kikuyu to Victoria Nyanza *viâ* Mau and Sotik, 7000 to 8000 feet, May 4, 1892.

59. *LYCÆNA GAIKA*.

*Cupido gaika*, Trim. ; Kirby, op. cit. p. 362 (1871).

*Lycæna gaika*, Trimen, op. cit. ii. p. 50 (1887).

a. Nzoi, 3500 feet, Jan. 15, 1892.

b. Voi River, 1600 feet, Jan. 20, 1892.

c. Ndara Hill, Teita, 3300 feet, Feb. 3, 1892.

d. Uganda, 4000 feet.

60. *LYCÆNA PULCHRA*.

*Lycæna pulchra*, Murray, Trans. Ent. Soc. 1874, p. 524, pl. 10. figs. 7, 8.

*Tarucus pulcher*, Butler, P. Z. S. 1888, p. 68.

a-e. March from Mreru in Ndi to Tsavo, 2300 to 1650 feet, Jan. 11, 1892.

f-h. Ndara Hill, Teita, 3300 feet, Feb. 3, 1892.

i-m. Kibwezi, 3000 feet, Feb. 6, 1892.

n. Nzoi, 3500 feet, Feb. 16, 1892.

61. *LYCÆNESTHES LIGURES*.

*Lycænesthes ligures*, Hewits. ; Kirby, op. cit. App. p. 783 (1877).

a. Uganda, 4000 feet.

62. *LYCÆNESTHES LARYDAS*.

*Lycænesthes larydas* (Cram.); Kirby, op. cit. App. p. 783 (1877); Trimen, op. cit. ii. p. 96 (1887).

a. Uganda, 4000 feet.

63. *TATURA PACHALICA*.

*Hypolycæna (Tatura) pachalica*, Butl. P. Z. S. 1888, p. 69 (Wadelai).

a. Tsavo, 1500 feet.

b. March from Mreru in Ndi, 2300 to 1650 feet, Jan. 11, 1892.

c, d. Uganda, 4000 feet, June 1892.

64. *CASTALIUS MARGARITACEUS*.

*Castalius margaritaceus*, E. M. Sharpe, P. Z. S. 1891, p. 636, pl. xlviii. fig. 3.

a. March from Kikuyu to Victoria Nyanza *viâ* Mau and Sotik, 7000 to 8000 feet, May 4, 1892.

65. *CASTALIUS MELÆNA*.

*Lycæna melæna*, Trimen, op. cit. ii. p. 82 (1887).

a. Voi River, 1600 feet, Jan. 20, 1892.

## Family PIERIDÆ.

## 66. NYCHITONA ALCESTA.

*Pontia alcesta* (Cram.); Kirby, op. cit. p. 439 (1871); Trimen, op. cit. iii. p. 8 (1889).

a. Ndara Hill, Teita, 3300 feet, Feb. 3, 1892.

## 67. TERIAS BRIGITTA.

*Eurema brigitta* (Cram.); Kirby, op. cit. p. 447 (1871).

*Terias brigitta*, Trimen, op. cit. iii. p. 14 (1889).

a. March from Mreru in Ndi to Tsavo, 2300 to 1650 feet, Jan. 9, 1892.

## 68. TERIAS ZOË.

*Eurema brigitta*, var. *d*, Kirby, op. cit. p. 448 (1871).

*Terias zoë*, Hopff.; Trimen, op. cit. iii. p. 16 (1889).

a, b. Maungu Hill, 3600 feet, Dec. 30, 1892.

c. March from Mreru in Ndi, 2300 feet, to Tsavo, 1600 feet, Jan. 9, 1892.

d, e. Ndara Hill, Teita, 3300 feet, Feb. 3, 1892.

f, g. Nzoi, 3500 feet, Jan. 15, 1892.

## 69. TERIAS ORIENTIS.

*Terias orientis*, Butler, P. Z. S. 1888, p. 71.

a. Teita District, 3000 feet.

## 70. PINACOPTERYX PIGEAE.

*Pieris pigea*, Boisd.; Kirby, op. cit. p. 455 (1871); Trimen, op. cit. iii. p. 46 (1889).

a. Voi River, 1600 feet, Jan. 20, 1892.

b. Ndara Hill, Teita, 3300 feet, Feb. 3, 1892.

## 71. PINACOPTERYX SIMANA.

*Pieris simana*, Hopff.; Trimen, op. cit. iii. p. 50 (1889).

*Pieris charina*, Boisd., pt.; Kirby, op. cit. p. 456 (1871).

a, b. Voi River, 1600 feet, Jan. 20, 1892.

## 72. PINACOPTERYX SPILLERI.

*Pieris spilleri*, Staudinger; Trimen, op. cit. iii. p. 54 (1889).

a, b. Voi River, 1600 feet, Jan. 20, 1892.

## 73. PINACOPTERYX NIGROPUNCTATA.

*Pinacopteryx nigropunctata*, E. M. Sharpe, Ann. Nat. Hist. (6) v. p. 336 (1890); Waterh. Aid, pl. 189. fig. 4 (1882-90).

a, b. March from Teita to Voi River, 3500 to 2100 feet, Jan. 6, 1892.



## 74. BELENOIS SEVERINA.

*Pieris severina* (Cram.); Kirby, op. cit. p. 457 (1871); Trimen, op. cit. iii. p. 68 (1889).

*Belenois severina*, Hampson, op. cit. (6) vii. p. 182 (1891, Sabaki River).

a-c. March from Maungu to Maragoyakanga, 3100 to 2400 feet, Dec. 30, 1891.

d-f. March from Teita, 3500 feet, to Voi River, 2100 feet, Jan. 6, 1892.

g. March from Voi River to Ndi, 1925 to 2300 feet, Jan. 8, 1892.

h-k. Ndara Hill, Teita, 3300 feet, Feb. 3, 1892.

## 75. BELENOIS AGRIPPINA.

*Pieris agrippina*, Feld.; Kirby, op. cit. p. 457 (1871).

*Pieris severina* (Cram., pt.); Trimen, op. cit. iii. p. 68 (1889).

a-d. March from Maungu to Maragoyakanga, 3100 to 2400 feet, Dec. 30, 1891.

e-h. March from Voi River to Ndi, 1925 to 2300 feet, Jan. 8, 1892.

i-l. Ndara Hill, Teita, 3300 feet, Feb. 3, 1892.

## 76. BELENOIS BOGUENSIS.

*Pieris boguensis*, Feld.; Kirby, op. cit. p. 457 (1871).

*Pieris severina* (Cram., pt.); Trimen, op. cit. iii. p. 68 (1889).

a. March from Maungu to Maragoyakanga, 3100 to 2400 feet, Dec. 30, 1890.

b. March from Teita, 3500 feet, to Voi River, 2100 feet, Jan. 6, 1892.

c. Ndara Hill, Teita, 3300 feet, Jan. 3, 1892.

## 77. BELENOIS ZOCHALIA.

*Pieris zochalia*, Boisd.; Kirby, op. cit. p. 457 (1871); Trimen, op. cit. iii. p. 57 (1889).

a. Ndara Hill, Teita, Feb. 3, 1892.

b, c. March from Kikuyu to Victoria Nyanza *viâ* Sotik, May 1892.

## 78. BELENOIS INFIDA.

*Belenois infida*, Butler, P. Z. S. 1888, p. 78 (Wadelai).

a. March from Maungu to Maragoyakanga, Jan. 1, 1892.

b. Teita, 3500 feet, to Voi River, 2100 feet, Jan. 6, 1892.

c-k. March from Mreru in Ndi to Tsavo, 3300 to 1680 feet, Jan. 11, 1892.

l. Kibwezi, Feb. 5, 1892.

m. March from Kikuyu to Victoria Nyanza *viâ* Sotik, May 1892.



## 79. BELENOIS GIDICA.

*Pieris gidica*, Godt. ; Kirby, op. cit. p. 457 (1871) ; Trimen, op. cit. iii. p. 64 (1889).

*Belinois gidica*, Hampson, op. cit. (6) vii. p. 182 (1891, Sabaki River).

*a, b.* Uganda, 4000 feet.

## 80. BELENOIS THYSA.

*Pieris thysa*, Hopff. ; Trimen, op. cit. iii. p. 44 (1889).

*a-d.* Kibwezi, 3000 feet, Feb. 6, 1892.

## 81. MYLOTHRIS AGATHINA.

*Tachyris agathina* (Cram.) ; Kirby, op. cit. p. 464 (1871).

*Mylothris agathina*, Trimen, op. cit. iii. p. 30 (1889).

*a-b.* Kibwezi, 3000 feet, Feb. 6, 1892.

## 82. MYLOTHRIS RHODOPE.

*Tachyris rhodope* (Fabr.) ; Kirby, op. cit. p. 463 (1871).

*a-d.* Teita, 2000 to 3000 feet.

## 83. MYLOTHRIS NARCISSUS.

*Mylothris narcissus*, Butler, P. Z. S. 1888, p. 95 (Kilimanjaro).

*a.* March from Teita, 3500 feet, to Voi River, 2100 feet, Jan. 5, 1892.

*b.* Ndara Hill, Teita, 3300 feet, Feb. 3, 1892.

## 84. MYLOTHRIS JACKSONI.

*Mylothris jacksoni*, E. M. Sharpe, P. Z. S. 1891, p. 190, pl. xvi. fig. 3.

*a, b.* March from Kikuyu to Victoria Nyanza *via* Sotik, May 4, 1892.

## 85. ERONIA DILATATA.

*Eronia dilatata*, Butler, P. Z. S. 1888, p. 96.

*a-g.* Maungu Hill, 3900 feet, Dec. 30, 1891.

*h.* March from Maungu to Maragoyakanga, 3100 to 2400 feet, Dec. 30, 1891.

*i.* Ndara Hill, Teita, 3300 feet, Feb. 8, 1892.

## 86. ERONIA LEDA.

*Eronia leda* (Boisd.), Kirby, op. cit. p. 480 (1871) ; Trimen, op. cit. iii. p. 174 (1889).

*a.* Maungu Hill, Dec. 31, 1891.

*b.* March from Maungu to Maragoyakanga, 3100 to 2400 feet, Dec. 31, 1891.

*c.* Kibwezi, 3000 feet, Feb. 6, 1892.

87. *NEPHERONIA THALASSINA*.

*Eronia thalassina* (Boisd.); Kirby, op. cit. p. 481 (1871).

*Nepheronia thalassina*, Hampson, op. cit. (6) vii. p. 182 (1891, Sabaki River).

a-f. Kibwezi, 3000 feet, Feb. 6, 1892.

88. *NEPHERONIA ARGIA*.

*Eronia argia* (Fabr.); Kirby, op. cit. p. 481 (1871); Trimen, op. cit. iii. p. 179 (1889).

a. Teita, 2500 to 3000 feet.

89. *NEPHERONIA BUQUETII*.

*Eronia buquetii* (Boisd.); Kirby, op. cit. p. 481 (1871); Trimen, op. cit. iii. p. 177 (1889).

a. March from Teita, 3500 feet, to Voi River, 2100 feet, Jan. 5, 1891.

b. March from Voi River to Ndi, 1925 to 2300 feet, Jan. 8, 1892.

90. *CALLIDRYAS FLORELLA*.

*Catopsilia florella* (Fabr.); Kirby, op. cit. p. 481 (1871); Trimen, op. cit. iii. p. 185 (1889).

a. March from Maungu to Maragoyakanga, Jan. 1, 1892.

b. March from Voi River to Ndi, 1925 to 2300 feet, Jan. 8, 1892.

c-d. March from Mreru in Ndi to Tsavo, 2300 to 1650 feet, Jan. 9, 1892.

e. Nzoi, 3500 feet, Feb. 15, 1892.

91. *CALLIDRYAS PYRENNE*.

*Catopsilia florella* (Fabr., pt.); Kirby, op. cit. p. 481 (1871).

a-b. March from Teita, 3500 feet, to Voi River, 1200 feet, Jan. 6, 1892.

c. March from Mreru or Mbololo in Ndi to Tsavo, 2300 to 1650 feet, Jan. 11, 1892.

d. Nzoi, 3500 feet, Feb. 15, 1892.

92. *COLIAS ELECTRA*.

*Colias electra* (Linn.); Kirby, op. cit. p. 490 (1871); Trimen, op. cit. iii. p. 165 (1889).

a. March from Kikuyu to Victoria Nyanza *via* Mau and Sotik, 7000 to 8000 feet, May 1892.

93. *TERACOLUS CHRYSONOME*.

*Idmais chrysonome* (Klug); Kirby, op. cit. p. 498 (1871).

a, b. March from Maungu to Maragoyakanga, Jan. 1, 1892.

c, d. Teita District.

94. *TERACOLUS AURIGINEUS*.

*Teracolus aurigineus*, Butler, P. Z. S. 1888, p. 72 (Wadelai).

*a-d.* March from Teita, 3500 feet, to Voi River, 2100 feet, Jan. 6, 1892.

*e, f.* Voi River, 1600 feet, Jan. 20, 1892.

95. *TERACOLUS ERIS*.

*Idmais eris* (Klug); Kirby, op. cit. p. 499 (1871).

*Teracolus eris*, Trimen, op. cit. iii. p. 93 (1889); Hampson, op. cit. (6) vii. p. 181 (1891, Sabaki River).

*a.* March from Maungu to Maragoyakanga, Jan. 1, 1892.

*b.* March from Teita, 3500 feet, to Voi River, 2100 feet, Jan. 6, 1892.

*c-e.* Voi River, 1600 feet, Jan. 20, 1892.

96. *TERACOLUS PHLEGYAS*.

*Callosune phlegyas*, Butl.; Kirby, op. cit. p. 500 (1871).

*Teracolus phlegyas*, Trimen, op. cit. p. 109 (1889); Hampson, op. cit. (6) vii. p. 181 (1891, Sabaki River).

*a-c.* March from Teita, 3500 feet, to Voi River, 2100 feet, Jan. 6, 1892.

97. *TERACOLUS IMPERATOR*.

*Callosune imperator*, Butl.; Kirby, op. cit. App. p. 804 (1877).

*Teracolus imperator*, Hampson, op. cit. (6) vii. p. 181 (1891, Sabaki River).

*a.* Maungu Hill, 3600 feet, Dec. 30, 1891.

*b.* March from Teita, 3300 feet, to Voi River, 2100 feet, Jan. 6, 1892.

*c.* March from Voi River to Ndi, 2300 feet, Jan. 8, 1892.

98. *TERACOLUS HETÆRA*.

*Callosune hetæra*, Gerst.; Kirby, op. cit. App. p. 804 (1877).

*a-k.* Maungu Hill, 3100 feet, Dec. 30, 1891.

*l.* Ndara Hill, Teita, 3300 feet, Feb. 3, 1892.

99. *TERACOLUS OMPHALE*.

*Callosune omphale* (Godt.); Kirby, op. cit. p. 502 (1871).

*Teracolus omphale*, Trimen, op. cit. p. 142 (1889).

*a.* Maungu Hill, 3100 feet, Dec. 30, 1891.

*b, c.* Voi River, 1600 feet, Jan. 20, 1892.

*d.* Ndara Hill, Teita, 3300 feet, Feb. 3, 1892.

100. *TERACOLUS PHILLIPSII*.

*Teracolus phillipsii*, Butl. P. Z. S. 1885, p. 772, pl. xlvii. fig. 11.

*a.* March from Maungu to Maragoyakanga, Jan. 1, 1892.

*b.* March from Teita, 3500 feet, to Voi River, 2100 feet, Jan. 6, 1892.

*c.* March from Voi River to Ndi, 1925 to 2300 feet, Jan. 8, 1892.

101. *TERACOLUS MINANS*.

*Teracolus minans*, Butler, Ent. M. Mag. xviii. p. 229 (1881-82).

*a, b.* March from Maungu to Maragoyakanga, 3100 to 2400 feet, Dec. 30, 1891.

*c.* March from Voi River to Ndi, 1925 to 2300 feet, Jan. 8, 1892.

*d-f.* March from Mreru in Ndi, 2300 feet, to Tsavo, 1650 feet, Jan. 9, 1892.

102. *TERACOLUS IGNIFER*.

*Callosune ignifer*, Butl. ; Kirby, op. cit. App. p. 804 (1877).

*a.* Ndara Hill, Teita, 3300 feet, Feb. 3, 1892.

*b.* March from Kikuyu to Victoria Nyanza *viâ* Mau and Sotik, May 4, 1892.

103. *TERACOLUS PHŒNIUS*.

*Callosune phœnius*, Butl. ; Kirby, op. cit. App. p. 805 (1877).

*Teracolus phœnius*, Hampson, op. cit. (6) vii. p. 181 (1891, Sabaki River).

*a, b.* March from Voi River to Ndi, 1925 to 2300 feet, Jan. 8, 1892.

*c, d.* March from Mreru in Ndi, 2300 feet, to Tsavo, 1650 feet, Jan. 9, 1892.

*e.* Voi River, 1600 feet, Jan. 20, 1892.

*f, g.* Nzoi, 3500 feet, Feb. 15, 1892.

104. *TERACOLUS HANNINGTONI*.

*Teracolus hanningtoni*, Butler, Ann. Nat. Hist. (5) xii. p. 104 (1883).

*a.* Nzoi, 3500 feet, Feb. 15, 1892.

105. *TERACOLUS CALAIS*.

*Idmais calais* (Fabr., pt.) ; Kirby, op. cit. p. 499 (1871).

*a.* March from Teita, 3500 feet, to Voi River, 2100 feet, Jan. 6, 1892.

*b-e.* March from Mreru in Ndi, 1330 feet, to Tsavo, 1650 feet, Jan. 9, 1892.

*f, g.* Voi River, 1600 feet, Jan. 23, 1890.

106. *TERACOLUS INCRETUS*.

*Teracolus incretus*, Butl. P. Z. S. 1888, p. 93 (Kilimanjaro).

*a.* Maungu Hill, 3100 feet, Dec. 30, 1891.

*b.* March from Maungu Hill to Maragoyakanga, 3100 to 2400 feet, Dec. 30, 1891.

*c.* March from Voi River to Ndi, 1925 to 2303 feet, Jan. 8, 1892.

*d.* Tsavo River.

*e.* Ndara Hill, Teita, 3300 feet, Feb. 3, 1892.

*f-l.* Nzoi, 3500 feet, Feb. 15, 1892.

107. *TERACOLUS HILDEBRANDTI*.

*Callosune hildebrandti*, Staudgr. Exot. Schmett. i. p. 44, pl. 23. fig. 12 (1888).

*a-e.* Teita, 3500 feet, to Voi River, 2100 feet, Jan. 6, 1892.

*f.* March from Voi River to Ndi, 2300 feet, Jan. 8, 1892.

*g.* Voi River, 1600 feet, Jan. 20, 1892.

108. *TERACOLUS LEO*.

*Anthocharis leo*, Butl. Ann. Nat. Hist. (3) xvi. p. 397 (1865).

*a-c.* March from Maungu to Maragoyakanga, Jan. 1, 1892.

109. *HERPÆNIA ITERATA*.

*Herpænia iterata*, Butler, P. Z. S. 1888, p. 96 (Kilimanjaro).

*a-e.* March from Maungu to Maragoyakanga, 3100 to 2400 feet, Dec. 30, 1891-Jan. 1, 1892.

*f.* March from Voi River to Ndi, 1925 to 2300 feet, Jan. 8, 1892.

110. *GLUTOPHRISSA CONTRACTA*.

*Glutophrissa contracta*, Butler, P. Z. S. 1888, p. 75.

*a, b.* Tsavo River, 1500 feet.

## Family PAPILIONIDÆ.

111. *PAPILIO LEONIDAS*.

*Papilio leonidas*, Fabr.; Kirby, op. cit. p. 520 (1871); Trimen, op. cit. iii. p. 211 (1889).

*a.* Voi River, 1600 feet, Jan. 20, 1892.

112. *PAPILIO DEMOLEUS*.

*Papilio demoleus*, Linn.; Kirby, op. cit. p. 543 (1871); Trimen, op. cit. p. 223 (1889); Hampson, op. cit. (6) vii. p. 182 (1891, Sabaki River).

*a, b.* March from Maungu to Maragoyakanga, 3100 to 2400 feet, Dec. 30, 1891.

*c.* March from Teita, 3500 feet, to Voi River, 2100 feet, Jan. 6, 1892.

*d.* March from Voi River to Ndi, 2300 feet, Jan. 8, 1892.

*e.* Ndara Hill, Teita, 3300 feet, Feb. 3, 1892.

*f.* Nzoi, 3500 feet, Feb. 15, 1892.

113. *PAPILIO NIREUS*.

*Papilio nireus*, Linn.; Kirby, op. cit. p. 562 (1871).

*a.* Maungu Hill, 3100 feet, Dec. 30, 1891.

*b.* March from Teita, 3500 feet, to Voi River, 2100 feet, Jan. 6, 1891.

*c-e.* Kibwezi, 3000 feet, Feb. 6, 1892.



114. *PAPILIO BRONTES*.

*Papilio brontes*, Godm. P. Z. S. 1885, p. 540 (Kilimanjaro).

*a.* Kikuyu, 4500 feet.

115. *PAPILIO PHORCAS*.

*Papilio phorcas*, Cram.; Kirby, op. cit. p. 563 (1871).

*a-c.* Kikuyu, 6500 feet.

116. *PAPILIO HESPERUS*.

*Papilio hesperus*, Westw.; Kirby, op. cit. p. 563 (1871).

*a.* Teita, 2000 to 3000 feet.

117. *PAPILIO MEROPE*.

*Papilio merope*, Cram.; Kirby, op. cit. p. 563 (1871).

*Papilio cenea*, Stoll, pt.; Trimen, op. cit. iii. p. 243 (1889).

*Papilio dardanus*, Brown, pt., Hampson, op. cit. (6) vii. p. 182 (1891, Sabaki River).

*a.* Teita, 1500 to 2500 feet.

118. *PAPILIO CENEA*.

*Papilio cenea*, Stoll; Trimen, op. cit. iii. p. 243 (1889).

*Papilio merope*, pt., Kirby, op. cit. p. 563 (1871).

*a-c.* Kibwezi, 3000 feet, Feb. 6, 1892.

*d.* Kikuyu, 6500 feet.

119. *PAPILIO COLONNA*.

*Papilio colonna*, Ward; Kirby, op. cit. App. p. 812 (1877); Trimen, op. cit. iii. p. 209 (1889); Hampson, op. cit. (6) vii. p. 182 (1891, Sabaki River).

*a-d.* Kibwezi, 3000 feet, Feb. 6, 1892.

120. *PAPILIO NYASSÆ*.

*Papilio nyassæ*, Butl. Ann. Nat. Hist. (6) vii. p. 49 (1891).

*a-c.* Kibwezi, 3000 feet, Feb. 6, 1892.

121. *PAPILIO JACKSONI*.

*Papilio jacksoni*, E. M. Sharpe, P. Z. S. 1891, p. 188, pl. xvii. figs. 1, 2.

*a-d.* March from Kikuyu to Victoria Nyanza *viâ* Sotik, May 1892.

122. *PAPILIO MACKINNONI*.

*Papilio mackinmoni*, E. M. Sharpe, P. Z. S. 1891, p. 187, pl. xvi. fig. 1.

*a.* March from Kikuyu to Victoria Nyanza *viâ* Sotik, May 1892.